

6th Street Viaduct Seismic Improvement Project

RECORD OF DECISION



Bridge Nos. 53C-1880 and 53-0595, in the City of Los Angeles,
Los Angeles County, California

EA 251200

Federal Project Number 5006 (342)

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



December 2011

California Department of Transportation, District 7

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Decision

The California Department of Transportation (Caltrans), under its assumption of responsibility from the Federal Highway Administration (FHWA) as the federal lead agency for this undertaking, has selected Alternative 3 for the 6th Street Viaduct Seismic Improvement Project. Alternative 3 was identified as the preferred alternative in the Final Environmental Impact Statement (Final EIS), dated October, 5 2011, which was prepared pursuant to the National Environmental Policy Act (NEPA). The Final EIS considered potential construction and operation impacts to the natural and human environments that would result from a No Action alternative (Alternative 1) and two build alternatives (Alternative 2 – Viaduct Retrofit and Alternative 3 – Viaduct Replacement). Identification of the preferred alternative was based on environmental impacts, funding availability, safety issues, and community input and acceptance. Caltrans based its decision on the Final EIS and supporting studies, as well as comments received from the public and agencies. With the adoption of this Record of Decision (ROD) by Caltrans, Caltrans will proceed with the understanding that the project has been approved.

Background

The 3,500–ft-long 6th Street Viaduct was constructed in 1932 using state-of-the-art concrete technology at that time. Over the last 75 years, concrete elements of the viaduct have cracked and deteriorated as a result of an internal chemical reaction called Alkali Silica Reaction (ASR), which is caused by the reactive aggregate used in the concrete. Because of this ongoing and irreversible chemical action, the 6th Street Viaduct's concrete has lost significant strength, and the structure is subject to failure under predictable seismic energy releases. The viaduct also has design deficiencies consisting of inadequate roadway width; out-of-specification bridge and approach railing, and approach rail ends; poor roadway alignment; and out-of-specification geometric and seismic design detail.

The purpose of the project is to:

- Preserve 6th Street as a viable east-west link between Boyle Heights and Downtown Los Angeles

- Reduce vulnerability of the 6th Street Viaduct in major earthquake events (a magnitude of 7.3 for this structure)
- Resolve design deficiencies of the 6th Street Viaduct

Selected Alternative

After comparing and weighing the benefits and impacts of the alternatives (see Table 1 for a summary of major impacts), funding availability and community acceptance, Alternative 3 (Viaduct Replacement) on Alignment 3B with the design principle of Bridge Concept 4 has been identified as the selected alternative.

The selected alternative would replace the existing 6th Street Viaduct over the Los Angeles River (Bridge No. 53C-1880) and the 6th Street Viaduct Overcrossing, which spans the US 101 Hollywood Freeway (Bridge No. 53-0595). These two bridges comprise a single structure – the 6th Street Viaduct. Alignment 3B would be a horizontally curved alignment from Santa Fe Avenue to west of US 101. This alignment would maintain its present location on the south side of the existing bridge from Mateo Street to Santa Fe Avenue, and would shift to the north from Santa Fe Avenue to the east as it crosses over the river. The new alignment would swing to the north approximately 85 ft farther than the existing alignment on the east side of the river, which would upgrade the existing non-standard curve radius at the east end.

The new structure within the City's right of way (ROW) would have a cross section that meets secondary highway standards as required by the City of Los Angeles Department of Transportation (LADOT). The new roadway would have a maximum width of 70 ft (curb-to-curb) and would consist of two 11-ft-wide lanes in each direction, a median with a maximum width of 10 ft, and outside shoulders with a maximum width of 8 ft, which would incorporate future bicycle lanes. The proposed cross section would also allow for sidewalks with a maximum width of 10 ft. Bridge rails located on the outside edges of the structure would have a width of 2 ft. The typical width to the outside of the bridge rails would therefore be 94 ft maximum.

The cross section within Caltrans' ROW (over US 101) would be slightly different. In this section, the viaduct roadway would be 74 ft, curb-to-curb, consisting of two 12-ft-wide lanes in each direction, a 10-ft-wide median, and 8-ft-wide shoulders. The proposed cross section also allows for 8-ft-wide sidewalks on both sides of the structure.

The viaduct replacement would meet the current standards set forth by the American Association of State Highway and Transportation Officials (AASHTO). The replacement would resolve the seismic vulnerability due to ASR and the geometric design and structural detailing deficiencies of the viaduct. Alternative 3 extends along 6th Street from west of southbound Interstate 5 on the east side of the Los Angeles River to Mill Street on the west side of the river. The new viaduct would have a structural design life of 75 years. Chapter 2 of the Final EIS provides a detailed description of the selected (preferred) alternative design features.

The City of Los Angeles (City) would go through a process to refine the final design for the bridge replacement to ensure that both an architecturally distinctive and cost-effective design expression is selected for construction. Design details of the preferred cable-supported bridge type could evolve into different engineering and architectural

expressions of this concept, in terms of tower and cable connection form for example, in addition to aesthetic elements of colors, textures, lighting, railings, and gateway elements.

Demolition and construction would be accomplished in a multi-phase manner with concurrent sub-phases. It is currently planned that demolition/construction would begin in 2013 and be completed over a 4-year timeframe. The estimated cost to construct the selected alternative is \$401 million in 2010 dollars.

As part of the construction of Alternative 3, several roadway improvements at nearby intersections would be undertaken to maintain traffic operation during the construction period when the viaduct would have to be closed (see Final EIS, Chapter 2, Section 2.3.3.4).

Alternatives Considered

A full range of alternatives was considered in the course of identifying the selected alternative. A brief description of the project alternatives given full consideration in the Final EIS is presented below.

Alternative 1

Referred to as No Action, this alternative provides neither retrofit nor replacement of the seismically and functionally deficient 6th Street Viaduct. The ASR-induced deterioration of the structure would continue, and the seismic vulnerabilities would worsen as the concrete strength continued to deteriorate. The City would provide ongoing inspection and maintenance on the viaduct to keep it open to traffic as long as possible, given the ongoing ASR deterioration. The 6th Street Viaduct would remain at its existing roadway width of 46 ft, which accommodates two travel lanes in each direction with no outside shoulders or safety median. None of the design deficiencies would be corrected under this alternative.

Under Alternative 1, the viaduct may be determined to be unserviceable by the City of Los Angeles and Caltrans due to advanced ASR deterioration or a major seismic event in the future, the timing of which cannot be predicted. Under such an event, the City would take the viaduct out of service and seek emergency funding sources to replace it.

Alternative 2

Under this alternative, the viaduct's columns would be retrofitted by encasing them with heavy steel, and infill walls would be constructed between selected columns. In addition, new foundations, grade beams, retrofitting of bent caps, and closure of some expansion joints in the superstructure would be constructed in combination with the column retrofits. The structure would be retrofitted to the minimal standard of "no collapse" for a major earthquake (a magnitude 7.3 on the Richter Scale). The retrofit design life expectancy would be approximately 30 years.

Alternative 3

This alternative is described above as the selected alternative.

Environmentally Preferable Alternative

Alternative 2, viaduct retrofit, is identified for purposes of this ROD as the environmentally preferable alternative. The retrofit of the viaduct would be environmentally preferable over replacement primarily from the perspectives of historic preservation, right-of-way impacts, and construction-related traffic impacts. Alternative 2 would extend the design life of the historic 6th Street Viaduct for approximately 30 years and consequently making it more acceptable from a historic preservation point of view. However, Alternative 2 would result in an adverse effect on the National Register of Historic Places (NRHP)-eligible 6th Street Viaduct due to alteration of historic materials, features, and spatial relationships that characterize the viaduct primarily by the wrapping of columns with heavy steel casing and constructing infill walls between selected columns (see Final EIS, Section 3.9.3.2). Based on detailed analysis of potential right-of-way impacts, Alternative 2 would only require relocation of two businesses as compared to Alternative 3, Alignment B—the selected alternative, which would require relocation of 11 businesses (see Final EIS, Table 3.4-1). Construction of Alternative 2 would only require partial lane closures on the viaduct and would have a construction duration of 2.5 years, whereas Alternative 3 would require complete closure of the viaduct for 4 years and rerouting of all traffic—impacting 13 intersections along the detour route—as well as pedestrians, bicycles, and public transit (see Final EIS, Section 3.7.3).

Basis for Identification of Selected Alternative

Alternative 3, Viaduct Replacement, is selected as the preferred alternative because it would fully attain the purpose and need of the project. Alternative 3 would replace the ASR-damaged 6th Street Viaduct with a new structure designed to meet current seismic safety standards required by Caltrans and geometric standards set forth by AASHTO.

Although Alternative 2, Viaduct Retrofit, would have lower construction costs and would preserve some historic elements of the viaduct compared to the Alternative 3, it would not be able to stop, reverse, or mitigate the ASR deterioration and, consequently, would have the highest life-cycle cost—requiring replacement beyond the 30-year design life. Alternative 2 would only meet a “no collapse” standard; significant damage could occur in a major earthquake. In addition, it would not correct the geometric deficiencies of the existing viaduct, would require reduction of railroad horizontal clearances below the requirements of the operators, and would adversely affect the NRHP eligibility of the historic resource. Therefore, although Alternative 2 would partly achieve the project’s purpose and is identified in this ROD as the environmentally preferable alternative, due to the deficiencies described above, it was determined to be substantially inferior to Alternative 3.

Implementation of Alternative 1 would not meet the purpose and need of the project.

Section 4(f)

Under the selected alternative, the demolition and replacement of the 6th Street Viaduct would be a direct use of a Section 4(f) resource. Measures to minimize harm are presented in the “*Memorandum of Agreement (MOA) between Caltrans and the California State Historic Preservation Officer regarding the 6th Street Viaduct Seismic Project.*” Measures 3-11 through 3-17 in Table 1 would be implemented to resolve the adverse effect of the undertaking on the NRHP-eligible 6th Street Viaduct. Based on the considerations in the Final Section 4(f) Evaluation, there is no feasible and prudent alternative to the use of the 6th Street Viaduct. Four avoidance alternatives were considered but none of them were determined to be feasible and prudent. Alternative 3 includes all possible planning to minimize impacts to the 6th Street Viaduct resulting from such use and causes the least overall harm in light of the statute’s preservation purpose.

Measures to Minimize Harm

The selected alternative incorporates all practicable measures to minimize environmental harm, which are described in the Final EIS. Table 1 lists the construction and operational impacts and the measures adopted to minimize potential impacts. All measures listed are commitments imposed under this ROD for the selected alternative. This listing is provided to guide and facilitate project design and construction. This list would also facilitate the monitoring of implementation of the mitigation measures. The measures described below would either be incorporated into or implemented in conjunction with the design and/or construction of the selected alternative.

Table 1
Potential Adverse Impacts and Avoidance, Minimization,
and/or Mitigation Measures

Environmental Resource	Potential Adverse Impact	Avoidance, Minimization, and/or Mitigation Measures
Land Use and Planning	<ul style="list-style-type: none"> Up to 33 businesses would be affected, 11 of which would be subject to relocation. These businesses are located in the designated “industrial preservation and employment protection zone” and it would be inconsistent with the City of Los Angeles Industrial Land Use Policy objective of preserving the industrial area and employment. In addition, the ROW displacement would be inconsistent with the objective of the two redevelopment projects administered by the Community Redevelopment Agency of the City of Los Angeles. 	<p>No avoidance, minimization, and/or mitigation measures are adopted pertaining to land use inconsistencies.</p>
Community Impacts	<ul style="list-style-type: none"> Community disconnection could occur on a temporary basis during construction Loss of historic resource and community landmark to which many residents are attached. The viaduct and all acquired buildings would be first removed. Roadway blockage to the remaining businesses would temporarily occur during the demolition and construction activities. Up to 33 businesses would be affected, 11 of which would be subject to relocation. Approximately 200 employees may experience temporary job loss. Long-term job loss is not anticipated because most of the affected businesses have expressed interest in staying in Downtown Los Angeles. Construction would require full closure of the 6th Street Viaduct. Construction of the selected alternative would cause disproportionately high adverse effects on minority and/or low-income populations who live closer to the viaduct and the proposed detour routes as per Executive Order 12898 regarding environmental justice. 	<ul style="list-style-type: none"> MM3-1: Conduct a public outreach program to keep residents, businesses, utility service providers, emergency service providers (including Fire and Police Departments) within the project area informed of the project construction schedule, demolition plan, material hauling plan, relocation plans and assistance programs, traffic-impacted areas, and the Traffic Management Plan (TMP) and other relevant project information. MM3-2: Require the construction contractor to submit the means and methods for demolition for LABOE review and approval. During the demolition period, construction inspectors shall ensure the contractors adhere to the approved plan. MM3-3: Participate in ongoing meetings with the LABOE Los Angeles River Project Office (LARPO) to implement elements of the Los Angeles River Revitalization Master Plan (LARRMP) related to Greening Concept objectives to improve the area near the 6th Street Viaduct and provide potential future connections to the river corridor from the viaduct. In addition to LARPO, meetings would include, but are not limited to, the Planning Department, the Recreation and Parks Department, and the Community Redevelopment Agency. MM3-4: Provide improvements to enhance the aesthetics and pedestrian safety of 11 out of 13 affected intersections along the proposed detour routes that could not be mitigated (see Final EIR/EIS Traffic Impacts Section). Types of improvements would be developed with public input and using context-sensitive design solutions, and may include but not be limited to decorative crosswalk with community theme and raised median with hardscape treatment where space allows. MM3-5: Develop a construction staging plan

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		<p>and TMP in close coordination with members of the Downtown Construction Traffic Management Committee and with agencies or developers responsible for other planned projects in the immediate vicinity of the proposed project to minimize direct and cumulative construction impacts on the community. The TMP shall also identify and provide alternate traffic detour routes, construction materials hauling routes, bus stops, transit routes and operation hours, pedestrian and bicycle routes, and residential and commercial access routes to be used during the construction period.</p> <ul style="list-style-type: none"> • MM3-6: Inform key event organizers in the Boyle Heights and Downtown Arts District communities of the construction schedule to avoid conflict on the use of areas near 6th Street Viaduct for any festive events. • MM3-7: The LAHSA would be contacted to provide services to any homeless people found within the project area prior to construction.
Utilities and Emergency Services	<ul style="list-style-type: none"> • Temporary or permanent relocation of some utility services would be required. • Disruption to railroad operations during construction. • Full closure of the 6th Street Viaduct during the 4-year construction period would delay emergency response services. 	<ul style="list-style-type: none"> • Implement MM3-1 above.
Traffic, Transportation, Pedestrian Facilities	<ul style="list-style-type: none"> • Construction of the selected alternative would require full closure of the 6th Street Viaduct for up to 4 years, resulting in traffic detours along the street network east and west of the river. Traffic analysis revealed up to 13 out of 31 intersections under study would be impacted by detouring traffic. Temporary access restrictions would occur around the construction zone. Sidewalk closure requiring rerouting of pedestrians, and the loss of approximately 50 public parking spaces around the viaduct would also occur during the construction phase. • Loss of public parking spaces underneath and along the local streets near the viaduct would create inconvenience to area residents and businesses. • Travel delays of 5 to 10 minutes on public transit would occur from traffic detours. 	<ul style="list-style-type: none"> • Implement MM 3-5 above. • MM3-8: Require the construction contractor to install new traffic signals at the intersection of 4th Street and US 101 SB On- and Off-Ramps, and connect to Los Angeles City ATSAC system. • MM3-9: Require the construction contractor to restripe to add an eastbound right-turn lane at the intersection of 4th Street and Soto Street.
Visual and Aesthetics	<ul style="list-style-type: none"> • Replacement of the viaduct and the subsequent loss of the historic landmark would impact the views to the structure. The 	<ul style="list-style-type: none"> • MM3-10: Establish an Aesthetics Advisory Committee (AAC) to provide input and advice throughout the design period of the project,

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	<p>various bridge replacement concepts would be expected to alter the existing views to varying degrees. The most notable visual impact would be from replacement of the historic structure with a new structure of contemporary design (i.e., the cable-supported design).</p> <ul style="list-style-type: none"> The new bridge would likely include architectural lighting. It is likely that the accent lighting would be a noticeable addition to the nighttime viewscape. 	<p>including input on bridge aesthetics for the new structure and associated roadways under improvement within the scope of this project. The AAC would participate in design review meetings and provide input on selected design elements including, but not limited to, colors, textures, lighting, railings, and community/City gateway monumental elements.</p> <ul style="list-style-type: none"> Implement MM3-3 and 3-4 above.
Cultural{x "Cultural Resources"} Resources	<ul style="list-style-type: none"> The project area has the potential for buried archaeological materials to be encountered during ground disturbance. Replacement of the viaduct would result in an adverse effect to a designated historic resource. The viaduct would be removed from the city-wide inventory of historic bridges over the Los Angeles River, impacting the City's remaining monumental resources on a cumulative basis. 	<ul style="list-style-type: none"> MM3-11: Prior to the start of any work that could adversely affect any characteristics that qualify the 6th Street Viaduct (Bridge No. 53C-1880 and 53-0595) as a historic property, the National Park Service (NPS) in Oakland, California, would be contacted to determine if additional recordation is required for the historic property beyond that provided in "Historic American Engineering Record, 6th Street Bridge, HAER No. CA-176," dated May 7, 1996. The City shall provide NPS 30 calendar days to respond to their additional recordation determination request. If additional documentation is required, the City shall ensure that the additional documentation is completed and accepted by NPS before the Viaduct is altered and/or demolished. The City shall prepare draft and final reports to be reviewed by NPS. MM3-12: Upon completion, copies of the documentation prescribed in the above measure, consisting of an acid-free xerographic copy of the report, prepared on standard 8.5-inch by 11-inch paper, shall be retained by Caltrans District 7, deposited in the Caltrans Transportation History Library in Sacramento, and offered by the City to, at a minimum, the Los Angeles Public Library, Los Angeles Conservancy, Los Angeles City Historical Society, Historical Society of Southern California, City of Los Angeles Office of Historical Resources, and the California Office of Historic Preservation. MM3-13: Work with the Los Angeles Public Library to place the historical information from the HABS/HAER report on a City Web site with a link to a public library Web site, such as the Los Angeles Public Library Web site, available to the public for a minimum period of 3 years. The information link would also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on their Web site.

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		<ul style="list-style-type: none"> • MM3-14: Produce a documentary (motion picture or video) that addresses the history of the Los Angeles River Monument bridges, and their importance and use within the broader contextual history of the City of Los Angeles. The motion picture or video shall be of broadcast quality, between 30- and 90-minute duration, and shall be made available to local broadcast stations, public access channels in the local cable systems, and requesting schools/libraries; one copy shall be submitted to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento. • MM3-15: Produce and publish a booklet on the Historic Los Angeles River Bridges that addresses the history of the monumental concrete bridges of Los Angeles and this bridge's place in that history. The booklet shall be similar in general format to the "Historic Highway Bridges of California" published by Caltrans (1991) and shall include high-quality black-and-white images of the Los Angeles River Bridges, historic photographs or drawings, as appropriate, and text describing each of the bridges' location, year built, builder, bridge type, significant character-defining features, and its historic significance. City shall post an electronic version of the booklet on a City Web site and produce paper copies for distribution to local libraries, institutions, and historical societies. One copy shall be submitted to the Caltrans Transportation Library and History Center in Sacramento. City shall maintain the camera-ready master booklet and produce additional copies if there is demand. • MM3-16: Install two new freestanding informative permanent metal plaques or signage at both ends of the bridge at public locations that provide a brief history of the bridge, its engineering features and characteristics, and the reasons it was replaced. • MM3-17: Offer artifacts removed from the viaduct during demolition to local museums or other suitable facilities to be determined by the City. The accepting institutions shall arrange their own transportation to deliver the artifacts to designated locations. • MM3-18: Establish an Environmentally Sensitive Area (ESA) Action Plan, which would include fencing of site no. 19-003683, archaeological and Native American monitoring during ground-disturbing activities, and training of construction

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		workers.
Water Quality and Stormwater Runoff	No substantial adverse impacts would occur with the incorporation of construction and permanent treatment best management practice (BMP) devices into the project specifications and design.	No avoidance, minimization, and/or mitigation measures are included.
Paleontology	No previously recorded paleontological sites were identified during the records search; however, there is the potential to uncover fossil remains as a result of earth-moving activities.	<ul style="list-style-type: none"> • MM3-19: Retain a qualified paleontologist to develop and implement a Paleontological Monitoring Plan. Conduct paleontological monitoring onsite to inspect new exposures created by earth-moving activities in areas underlain by the older alluvium and at depths greater than 5 ft below current grade for the younger alluvium.
Hazardous Waste/Materials	<ul style="list-style-type: none"> • Based on the results of a site investigation conducted along the existing viaduct corridor, soil and groundwater at the project site have the potential to be contaminated with volatile organic compounds and petroleum hydrocarbons; this could impact workers and the environment. • Bridge elements and buildings to be demolished may have asbestos-containing materials in the form of coatings, insulation, and/or expansion joint compounds and lead-based paint coatings, which could cause health effects to workers. • Soils near US 101 may contain aerially deposited lead generated by motor vehicle exhaust, which could cause health effects to workers. 	No specific avoidance, minimization, and/or mitigation measures in addition to standard regulatory requirements are included.
Air Quality{xe "Air Quality"}	Under the worst-case day of the construction period (i.e., viaduct closed and traffic detour in effect), the regional emissions of nitrogen oxides (NO _x) would exceed the daily significance threshold set forth by South Coast Air Quality Management District (SCAQMD).	<ul style="list-style-type: none"> • MM3-20: Implement fugitive dust source controls by requiring the contractor to: <ul style="list-style-type: none"> – Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to active and inactive sites during workdays, weekends, holidays, and windy conditions. – Install wind fencing and phase grading operations, where appropriate, and operate water trucks for stabilization of surfaces under windy conditions. • MM3-21: Implement mobile and stationary source controls by requiring the contractor to: <ul style="list-style-type: none"> – Reduce use, trips, and unnecessary idling from heavy equipment. – Maintain and tune engines per manufacturer's specifications to perform at U.S. Environmental Protection Agency (EPA) certification levels, where

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		<p>applicable, and at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.</p> <ul style="list-style-type: none"> – Prohibit any tampering with engines and adhere to manufacturer's recommendation. – Lease new and clean equipment meeting the most stringent of applicable federal and state standards, if practicable. – Utilize EPA-registered particulate traps and other appropriate controls, where suitable, to reduce emissions of particulate matter and other pollutants at the construction site. <ul style="list-style-type: none"> • MM3-22: Implement administrative controls by requiring its staff to: <ul style="list-style-type: none"> – Require the contractor to prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) – Where appropriate, use alternative fuels such as natural gas and electric. – Develop a construction traffic and parking management plan that minimizes interference and maintains traffic flow as part of the TMP.

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Biological Resources{xe "Biological Resources"}	<ul style="list-style-type: none"> Ornamental trees within the survey area have a limited potential to support nesting birds, which are protected by the Migratory Bird Treaty Act. A preconstruction survey would be conducted to identify any mature trees subject to removal prior to the commencement of construction activities. Cliff swallows and roosting bats may establish new nests under the viaduct deck. A preconstruction survey would be conducted to confirm the absence or presence of any nesting birds or roosting bats. If found, steps would be taken to remove them and prevent establishment of new nests or roosts prior to the beginning of the nesting season. 	<ul style="list-style-type: none"> MM3-23: Prevent possible damage and injury to migratory birds by scheduling the removal of vegetation (whether native or horticultural landscaping) in the project area between September 1 and January 31. If initial vegetation removal and ground clearance cannot be avoided between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey of trees and shrubbery for active nests. If active nests of migratory species occur within the construction area, then a temporary exclusion fence 50 ft in diameter shall be assembled around the nest. The biologist shall then monitor the site of active nests during the construction activities. Once the biologist determines that chicks have fledged or parents have abandoned the nest, the temporary fence can be removed and construction in such areas can proceed. If bats are found, bat proofing (exclusion) should be conducted outside of the breeding season (October 30 through March 1) after juvenile bats have learned to fly; exclusion should be staged to ensure that roosting sites in areas not currently under construction would be available at all times during the project to minimize the potential effects on bats.

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Cumulative Effects	<ul style="list-style-type: none"> • More business relocation could occur within the vicinity of the proposed project because there are foreseeable projects proposed to be constructed within the same locality of the project. • Cumulative community impacts could occur to area residents and businesses because there are foreseeable projects scheduled to be constructed in nearby vicinity during the same period as the project. • Low-income and/or minority populations living close to the viaduct would be subject to disproportionately higher impacts from concurrent construction activities. • More business relocations within the project vicinity could occur with implementation of other foreseeable projects; thus, impacting local businesses on a cumulative basis. • Cumulative traffic impacts would occur due to the required closure of the 6th Street Viaduct during the 4-year construction period. • Removal of the 6th Street Viaduct would impact the City's historic-cultural monument bridges on a cumulative basis. • Cumulative air pollutant emissions could occur because there are foreseeable projects scheduled to be constructed in the vicinity during the same period as the project. 	With implementation of the adopted mitigation measures under each individual resource; no additional mitigation measures are required.

Monitoring program

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance with 23 *Code of Federal Regulation* (CFR) 635.309(j). The MMRP identifies responsible parties and provides guidelines for implementation and reporting for all mitigation measures described in Chapter 3 of the Final EIS. The MMRP is located in Appendix F of the Final EIS.

The City of Los Angeles, Department of Public Works will be responsible for implementing and reporting the status of the mitigation measures in the MMRP. The City will also be responsible for construction management and oversight, and assuring that mitigation measures are fully implemented by designated and qualified personnel, which may include design and construction or other specialty contractors.

All mitigation monitoring report forms will be completed by those responsible for implementation, and verified by those responsible for monitoring and approval. Duplicate copies of certified forms will also be retained in the City's archives with the 'as-built' drawings for this project. In addition, the California Department of Transportation (Caltrans), assuming responsibility as federal lead agency, will be responsible for oversight to ensure that the mitigation measures are implemented.

Response to Comments on the Final EIS

The Final EIS was circulated to other governmental agencies, organizations, and the public on October 21, 2011. Notice of Availability (NOA) was published in the Federal Register on October 28, 2011 and on November 4, 2011. The 30-day review period ended on December 3, 2011. One comment letter from the U.S. Environmental Protection Agency (EPA) was received. A copy of the comment letter and response is provided on the following pages.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105

NOV 30 2009

Mr. Carlos Montez
California Department of Transportation
100 South Main Street
Los Angeles, California 90012-3606

Subject: Final Environmental Impact Statement for the 6th Street Viaduct Seismic Improvement Project, Los Angeles, California (CEQ # 20110374)

Dear Mr. Montez:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

In an August 24, 2009 letter, EPA provided comments on the Draft Environmental Impact Statement (DEIS) for this project and rated the DEIS as *Environmental Concerns – Insufficient Information* (EC-2). Our review of the Final Environmental Impact Statement (FEIS) finds that our concerns have been addressed. We encourage the California Department of Transportation and the City of Los Angeles to continue to work with community members through future bridge design and construction to minimize adverse impacts.

We appreciate the opportunity to review the FEIS. When the Record of Decision is signed, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact Susan Sturges (415-947-4188 or sturges.susan@epa.gov) of my staff.

Sincerely,

A handwritten signature in black ink, reading "Connell Dunning", is positioned above the typed name.

Connell Dunning, Transportation Team Supervisor
Environmental Review Office
Communities and Ecosystems Division

cc: Linda Moore, City of Los Angeles

Response to U.S. EPA Comment:

The EPA acknowledged that Caltrans and the City of Los Angeles has addressed the EPA's comments on the Draft EIS. Caltrans and the City will continue to work with the community members during the bridge design phase. As indicated in Mitigation measure 3-10, an Aesthetic Advisory Committee (AAC) will be formed to provide input and advice throughout the design period of the project, including input on bridge aesthetics for the new structure and associated roadways under improvement within the scope of this project. The AAC will participate in design review meetings and provide input on selected design elements including, but not limited to, colors, textures, lighting, railings, and community/City gateway monumental elements.

Record of Decision Approval

Replacement of the 6th Street Viaduct on Alignment 3B with the design principle of Bridge Concept 4 (Alternative 3 in Final EIS) has been determined to best provide a safe and efficient transportation facility. This selection was based on engineering and operational advantages, lower construction cost, and public and agency comments received during the environmental process. All practicable measures to minimize environmental harm have been adopted and are incorporated into this decision.

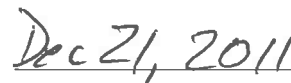
The Record of Decision for the 6th Street Viaduct Seismic Improvement Project is hereby approved.



MICHAEL MILES

District Director

California Department of Transportation, District 7



Date